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10/813,974	03/31/2004	Christopher A. Huey	41698-1116	5910

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BRANDON N. SKLAR, ESQ. (PATENT PROSECUTION)
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EXAMINER

NGUYEN, KHAI N

ART UNIT	PAPER NUMBER
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2609

MAIL DATE	DELIVERY MODE
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/813,974

Applicant(s)

HUEY, CHRISTOPHER A.

Examiner

Khai N. Nguyen

Art Unit

2609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on March 31, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on March 31, 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Abstract

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The length of the abstract for this instant application is 198 words, reducing to less than or equal to 150 words is recommended.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, 7-13, 16-23, 25-31, and 34-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Schaffer et al. (U.S. Patent No. 6,385,312).

Regarding claim 1, Schaffer et al teach a method for routing a call (Fig. 2 – i.e. routing network) from a communications device to a call center, comprising:

receiving the call (Fig. 1D, Fig. 27, Fig. 28A, Fig. 30, Fig. 39, and Fig. 40A – 110, i.e. calling, column 38 - lines 25-26, column 40 - lines 61-63) at a first call center (Fig. 27 & Fig. 30, column 38 – lines 49-51, column 40 – lines 63-65), the call being routed to the first call center based on a communications device identifier (Fig. 27 & Fig. 30, column 38 – lines 28-29, column 40 – lines 66-67 and column 41 – lines 1-3, i.e. Automatic Number Identification (ANI));

determining the geographic vicinity of the communications device (Fig. 27 – 1136, 1138 – column 39 - lines 33-40, i.e. Bellcore's V&H coordinate and LERG, and Fig. 39 – state 1452 – column 51 – lines 27-30. i.e. latitude and longitude) ; and

routing the call to a second call center if that second call center is closer to the geographic vicinity of the communications device than the first call center (Fig. 27 – 150a-150b – column 39, lines 1-4, and column 52 – lines 2-6).

Regarding claims 2 and 22, Schaffer et al teach a method and a system wherein the communications device identifier is automatic number identification (ANI) (Fig. 27, Fig. 30, column 38 – lines 28-29, column 40 – lines 66-67 and column 41 – lines 1-3, i.e. Automatic Number Identification (ANI)).

Regarding claim 3, Schaffer et al teach a method further comprising receiving a signaling stream associated with the call, the signaling stream including at least a caller location identifier or an initiating switch locator for respectively identifying the geographic vicinity of the caller or a switch through which the call is initially being routed (column 10 – lines 45-49, i.e. dialed telephone number and caller spatial coordinate).

Regarding claim 4, Schaffer et al teach a method wherein the geographic vicinity of the communications device is determined by decoding the caller location identifier or the initiating switch locator (column 51 – lines 27-30, i.e. looks up latitude and longitude from caller telephone number; column 52 – lines 49-65).

Regarding claims 5 and 23, Schaffer et al teach a method and a system wherein the caller location identifier comprises a caller geodetic location information parameter (CGLIP) (column 29 – lines 1-3, i.e. latitude and longitude geocoded, and column 29 – lines 28-29).

Regarding claims 7, 9, 25 and 27, Schaffer et al teach a method and a system wherein the initiating switch locator comprises a jurisdiction information parameter (JIP) and a call reference parameter (CRP) (Fig. 27 – 111, i.e. initiating switch, column 38 – lines 63-67, i.e. communication protocols – ISDN and ISUP).

Regarding claims 8, 10, 26 and 28, Schaffer et al teach a method and a system wherein the decoding comprises:

converting the JIP or CRP to a switch ID (Fig. 27 – 111, switch, column 39 – lines 38-40, i.e. uses Local Exchange Routing Guide (LERG) for switch ID);

converting the switch ID to geographical coordinates (column 39 – lines 33-34, i.e. vertical-horizontal coordinate file); and

converting the geographical coordinates to latitude and longitude (Fig. 5 – column 23 – lines 16-20, i.e. calculating site latitude and longitude).

Regarding claims 11 and 29, Schaffer et al teach a method and a system wherein the initiating switch locator comprises a common language location identification (CLLI) code (column 39 – lines 33-40, i.e. CLLI codes are associated with V&H coordinate to calculate distance between two network locations, and column 39 – lines 38-40, i.e. also Local Exchange Routing Guide (LERG) stored CLLI).

Regarding claims 12 and 30, Schaffer et al teach a method and a system wherein the decoding comprises:

converting the CLLI code to geographical coordinates (column 39 – lines 33-34, i.e. vertical-horizontal coordinate file associated with CLLI codes, and column 39 – lines 38-40, i.e. also Local Exchange Routing Guide (LERG) stored CLLI); and

converting the geographical coordinates to latitude and longitude (Fig. 5 – column 23 – lines 16-20, i.e. calculating site latitude and longitude).

Regarding claims 13 and 31, Schaffer et al teach a method and a system wherein the signaling stream is formatted in accordance with an SS7 protocol (column 38 – lines 25-28, i.e. Local Exchange Carrier (LEC), and column 38 – lines 63-67).

Regarding claims 16-18, and 35-36, Schaffer et al teach a method and a system wherein the second call center is within the same state as that of the communications device (Fig. 35 – 1220, column 52 – lines 2-6, i.e. “within service area”); and the second call center is within the same LATA as that of the communications device (Fig. 27 – 111, 150a, column 38 – lines 25-27 and column 39 – lines 1-4, i.e. LEC and service location, Fig. 35 – 1220, column 52 – lines 2-6, i.e. “within service area”); and the second call center is within the same time zone as that of the communications device (column 40 – lines 10-20).

Regarding claims 19, and 37, Schaffer et al teach a method and a system wherein there is a plurality of call centers closer to the geographic vicinity of the communications device than the first call center, and the second call center is the one call center out of the plurality of call centers that is closest to the geographic vicinity of the communications device (Fig. 22 – 109 Service Locations File, column 40 – lines 9-10, lines 14-16, and lines 19-20).

Regarding claims 20, and 38, Schaffer et al teach a method and a system further comprising routing the call to a third call center based on the expected wait time at the second call center (Fig. 1E – 152, 154 and 144 – column 19 – lines 6-7, and lines 10-11, i.e. exception handling).

Regarding claim 21, Schaffer et al teach a system (Fig. 27 & Fig. 30) for routing a call from a communications device (Fig. 27 & Fig. 30 – 110 calling) to a call center (Fig. 27 & Fig. 30 – 1000 call center), comprising:

an interface for receiving at a first call center a signaling stream associated with the call (Fig. 27 & Fig. 30 – 1130 Network Terminating Point Interface), the signaling stream including at least a communications device identifier and a caller location identifier or an initiating switch locator (Fig. 27 & Fig. 30 – 111 Network Switch), the caller location identifier identifying the geographic vicinity of the caller, and the initiating switch locator identifying the geographic vicinity of the switch through which the call is initially being routed (Fig. 27 & Fig. 30, column 38 – lines 28-29, column 40 – lines 66-67 and column 41 – lines 1-3, i.e. Automatic Number Identification (ANI), column 10 – lines 45-49, i.e. dialed telephone number and caller spatial coordinate);

a database for relating the caller location identifier or initiating switch locator to the geographic vicinity of the caller or initiating switch, respectively (Fig. 27 & Fig. 30 – 1134-1140, i.e. database server, NPA-NXX split file, phone database, and location table, column 44 – lines 30-61); and

a processor for retrieving the geographic vicinity of the caller or initiating switch, for determining a second call center closer to the geographic vicinity of the caller location or initiating switch location, and for routing the call to that second call center (Fig. 27 & Fig. 30 – 1150, 1010, 1214 and 1216, i.e. routing processor, phone number latitude/longitude table, service area file, column 42 – lines 30-40).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al. as applied to claims 5 and 23 above, and further in view of Hurst (U.S. Pub. No. 2003/0087647 A1).

Claim 6 - The method according to claim 5, wherein the decoding comprises converting the CGLIP from WGS format to latitude and longitude.

Claim 24 - The system according to claim 23, wherein the processor decodes the caller location identifier by converting the CGLIP from WGS format to latitude and longitude.

Regarding claims 6 and 24, Shaffer et al. disclose everything claimed as applied above (see claims 5, and 23). However, Shaffer et al. fail to disclose the additional WGS format, which can be used to convert the location information in the WGS84 format to latitude and longitude.

In the same field of endeavor, Hurst teaches a location calculation software translates the caller ID to a geographical coordinate such as WGS84 (Hurst – U.S. Pub. 2003/0087647 A1 - paragraph [0037]). The advantage of Hurst is location data on a large number of mobile devices can be obtained in real time, and without additional burden on the network (Hurst – U.S. Pub. 2003/0087647 A1 - paragraph [0141]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Shaffer with the converting the location information in WGS format to latitude and longitude.

6. Claims 14-15, and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al. as applied to claims 3 and 21 above, and further in view of Pogossiants et al. (U.S. Pub. 2001/0028649 A1).

Claim 14 - The method according to claim 3, wherein the content of the call is formatted according to a VoIP protocol and the signaling stream is formatted according to a session initiation protocol.

Claim 32 - The system according to claim 21, wherein the content of the call is formatted according to a VoIP protocol and the signaling stream is formatted according to a session initiation protocol.

Claim 15 - The method according to claim 3, wherein the content of the call is formatted according to a VoIP protocol and the signaling stream is formatted according to an H.323 protocol.

Claim 33 - The system according to claim 21, wherein the content of the call is formatted according to a VoIP protocol and the signaling stream is formatted according to an H.323 protocol.

Regarding claims 14-15 and 32-33, Schaffer et al. disclose everything claimed as applied above (see claims 3 and 21). However, Cave fails to specifically disclose their invention in detail about the call center can convert traditional voice data (PSTN – PCM format) to IP format (VoIP) and the appropriate IP signaling protocols (i.e. H.323 and session initiation protocol (SIP), these protocols are well known in the art). Although Shaffer et al. have described in the detail the computer-interface applications (Shaffer et al. – column 6 – lines 23-67), and Computer Telephony Integration (CTI) (Shaffer et al. – column 38, section IX).

In the same field of endeavor, Pogossiants et al. disclose a system comprises of formatting the content of the call to a VoIP protocol (Pogossiants et al – Fig. 3 - paragraph [0052], lines 1-13) and supporting H.323 and SIP protocols (Pogossiants et

al – paragraph [0015]). The advantage of Pogossiants et al. system is the combining of a telephony network and a data-packet network (Pogossiants et al – paragraph [0026]).

Therefore, it would have been obvious to person of ordinary skill in the art at the time the invention was made to provide Shaffer et al. with the detail of VoIP protocol and the related signaling protocols H.323 and SIP to enhance their computer-interface applications.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

McCalmont et al. (U.S. Pub. No. 2003/0086539 A1) teach the routing of emergency calls to the emergency service call center based on geographic location of the caller.

Houde et al. (U.S. Patent No. 6,128,481) teach the routing an emergency services call from a mobile station to a selected PSAP in a network.

Keagy (U.S. Pub. No. 2005/0174991 A1) teaches a method and an apparatus for packet-based phone with emergency call center.

Zhao et al. (U.S. Pub. No. 2004/0229620 A1) teach a method for routing a call based partially on the geographical location of the mobile unit.

Khuc et al. (U.S. Patent No. 6,473,505) teach a call processing system to handle calls to a call center by obtaining absolute address.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai N. Nguyen whose telephone number is (571) 270-3141. The examiner can normally be reached on Monday - Thursday 6:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on (571) 272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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SPE
Art Unit 2609

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7/05/2007